

Reply Comments

1. BellSouth Telecommunications, Inc.
2. Cablevision Systems Corporation
3. Comcast Cable Communication, Inc.
4. DIRECTV, Inc.
5. ESPN, Inc.
6. Group W Satellite Communications
7. GTE Service Corporation
8. Home Box Office
9. James Cable Partners, L.P.
10. Liberty Cable Company, Inc
11. Lifetime Television
12. National Cable Television Association, Inc.
13. National Rural Telecommunications Cooperative
14. Netlink USA
15. Next Level Communications
16. OpTel, Inc.
17. Pacific Bell and Pacific Telesis Video Services
18. Primestar Partners L.P.
19. Ridgebury Township, Pennsylvania, and the Pennsylvania State Association of Township Supervisors
20. Scripps Howard Cable TV Company
21. Small Cable Business Association
22. State of Hawaii
23. Superstar Satellite Entertainment
24. Tele-Communications, Inc.
25. Time Warner Cable
26. Turner Home Satellite, Inc.
27. United States Satellite Broadcasting Company, Inc.
28. ValueVision International, Inc.
29. Viacom Inc.
30. Video Dialtone Association
31. Wireless Cable Association International, Inc.

Miscellaneous Filings

1. Southwest Missouri Cable TV, Inc. (letter 7/31/95)

APPENDIX B

TABLE 1
Cable Television Industry Growth: 1989 - 1994
(in millions)

Year	U.S. Television Households ("TH")		Homes Passed ("HP")		Basic Cable Subscribers ("Subs")		National Saturation (HP/TH)	TV Households Subscribing (Subs/TH)	U.S. Penetration (Subs/HP)
	Year-End Total	Change From Previous Year	Year-End Total	Change From Previous Year	Year-End Total	Change From Previous Year			
1989	92.1	1.9%	82.8	7.3%	49.3	7.9%	89.9%	53.5%	59.5%
1990	93.1	1.1%	86	3.9%	51.7	4.9%	92.4%	55.5%	60.1%
1991	92.1 (*)	-1.1%	88.4	2.8%	53.4	3.3%	96.0%	58.0%	60.4%
1992	93.1	1.1%	89.7	1.5%	55.2	3.4%	96.3%	59.3%	61.5%
1993	94.2	1.2%	90.6	1.0%	57.2	3.6%	96.2%	60.7%	63.1%
1994	95.4	1.3%	91.6	1.1%	59.7	4.4%	96.0%	62.6%	65.2%

(*) Revised penetration figure based on 1990 Census

Sources:

- U.S. Television Households - A.C. Nielsen Co. as of January of the following year. Taken from Veronis, Suhler & Associates, *Homes Passed by Cable and Incidence of Subscription*, The Veronis, Suhler & Associates Communications Industry Forecast, July 1995, at 145.

- Homes Passed - Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5.

- Basic Cable Subscribers - Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5.

TABLE 2
Premium Cable Services: 1993 - 1994
(in millions)

Year	Premium Cable Service Subscribers		Premium Units	
	Year-End Total	Change From Previous Year	Year-End Total	Change From Previous Year
1989	23.6	5.8%	41.1	5.9%
1990	23.9	1.3%	41.5	1.0%
1991	24	0.4%	39.9	-3.9%
1992	24.7	2.9%	40.7	2.0%
1993	26.4	6.9%	41.5	2.0%
1994	28.1	6.4%	45	8.4%

Source:

- Paul Kagan Associates, Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5.

TABLE 3
Channel Capacity of Cable Systems: 1993 - 1994

Channel Capacity	1993*		1994*		93-94 Change
	Number of Systems	Percent of Systems	Number of Systems	Percent of Systems	
54 and over	1,306	13.1%	1,435	14.3%	9.9%
30 to 53	6,364	64.0%	6,376	63.7%	0.2%
20 to 29	1,197	12.2%	1,167	11.7%	-2.5%
13 to 19	364	3.7%	356	3.6%	-2.2%
6 to 12	697	7.0%	653	6.5%	-6.3%
5 or less	22	0.2%	17	0.2%	-22.7%
Not available	1,210		1,212		
Total	11,160		11,216		
Systems with capacities of 30 or more channels	7,670	77.1%	7,811	78.1%	1.84%
Systems with capacities of fewer than 30 channels	2,280	22.9%	2,193	21.9%	-3.82%

* Figures are as of November 1, 1993 and October 1, 1994.

Sources:

- 1993 - Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Cable Volume No. 62, 1994 Edition, at F-3.
- 1994 - Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Cable Volume No. 63, 1995 Edition, at I-77.

TABLE 4
Channel Capacity for Subscribers: 1993 - 1994
(in millions)

Channel Capacity	1993*		1994*		93-94 Change
	Subscribers	Percent of Subscribers	Subscribers	Percent of Subscribers	
54 and over	20.91	38.4%	23.02	41.5%	10.1%
30 to 53	31.71	58.2%	30.75	55.4%	-3.0%
20 to 29	1.48	2.7%	1.37	2.5%	-7.4%
13 to 19	.12	0.2%	.11	0.2%	-8.3%
6 to 12	.26	0.5%	.24	0.04%	-7.7%
5 or less	.00	0.0%	.00	0.0%	0.0%
Not available	.64		.87		
Total	55.12		56.36		
Systems with capacities of 30 or more channels	52.62	94.8%	53.77	96.9%	2.2%
Systems with capacities of fewer than 30 channels	1.86	3.4%	1.72	3.1%	-7.5%

* Figures are as of November 1, 1993 and October 1, 1994.

Sources:

- 1993 - Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Cable Volume No. 62, 1994 Edition, at F-3.
- 1994 - Warren Publishing, Inc., *Channel Capacity of Existing Cable Systems*, Television & Cable Factbook: Cable Volume No. 63, 1995 Edition, at I-77.

TABLE 5
Growth By Network Type: 1993 - 1994

Network Type	1993		1994		93-94 Change
	Number of Networks	Percent of Networks	Number of Networks	Percent of Networks	
Basic/No-Charge	80	79.21%	94	73.44%	17.50%
Premium	9	8.91%	20	15.63%	122.22%
Pay Per View	7	6.93%	8	6.25%	14.29%
Combination	5	4.95%	6	4.69%	20.00%
Total	101		128		26.73%

Source:

- National Cable Television Association, *National Cable Video Networks By Type of Service: 1976 - 1994*, Cable Television Developments, Spring 1995, at 7.

TABLE 6
Cable Industry Revenue and Cash Flow: 1992 - 1994

		1992		1993		1994	
		Year-End Total	% Change From Previous Year	Year-End Total	% Change From Previous Year	Year-End Total	% Change From Previous Year
Average Subscribers (mil.)		54.3	-	56.2	3.5%	58.5	4.1%
Revenue Segments (mil.)	Regulated Tiers	\$13,436	-	\$15,169	12.9%	\$15,164	0.0%
	Pay Tiers	\$4,980	-	\$4,625	-7.1%	\$4,522	-2.2%
	Advertising	\$852	-	\$984	15.5%	\$1,077	9.5%
	Pay-Per-View	\$404	-	\$452	11.9%	\$484	7.1%
	Home Shopping	\$90	-	\$113	25.6%	\$127	12.4%
	Miscellaneous + Installations	\$1,282	-	\$1,412	10.1%	\$1,412	0.0%
Total Revenue (mil.)		\$21,044	-	\$22,755	8.1%	\$22,786	0.1%
Revenue Per Sub		\$387.55	-	\$404.89	4.5%	\$389.50	-3.8%
Cash Flow (mil.)		\$9,700	-	\$10,100	4.1%	\$9,936	-1.6%
Cash Flow per Sub		\$178.64	-	\$179.72	0.1%	\$169.85	-5.5%
Cash Flow/Revenue		46.1%	-	44.4%	-3.7%	43.6%	-1.8%

Sources:

- Paul Kagan Assoc., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5 and Paul Kagan Assoc., Inc., *Estimated Capital Flows In Cable TV*, The Cable TV Financial Databook, July 1995, at 92.

TABLE 7
Annual Revenue and Cash Flow for Cable System Operators: 1992 - 1994¹

Operator	1992			1993			1994		
	Year End Subscribers	Cable Revenue (mil.)	Cable Cash Flow (mil.)	Year End Subscribers	Cable Revenue (mil.)	Cable Cash Flow (mil.)	Year End Subscribers	Cable Revenue (mil.)	Cable Cash Flow (mil.)
Tele-Communications	10,165,000	\$3,574.0	\$1,637.0	10,672,000	\$4,143.8	\$1,869.1	11,593,000	\$4,182.9	\$1,834.7
Time Warner	5,600,000	\$2,091.0	\$977.0	5,800,000	\$2,208.0	\$1,035.0	6,000,000	\$2,242.0	\$989.0
Comcast	2,583,000	\$725.7	\$356.3	2,648,000	\$1,092.7	\$552.0	3,307,000	\$1,065.3	\$517.5
Continental	2,856,000	\$1,113.5	\$488.3	2,895,000	\$1,177.2	\$527.6	3,081,000	\$1,198.0	\$525.1
Cox Comm.	1,722,007	\$652.1	\$275.1	1,784,337	\$708.0	\$295.6	1,851,726	\$736.3	\$268.5
Cablevision Systems	1,262,000	\$572.5	\$247.7	1,379,000	\$667.7	\$252.2	1,768,000	\$837.2	\$334.0
Times Mirror	1,182,581	\$423.1	\$165.0	1,208,398	\$470.4	\$198.1	1,274,908	\$497.7	\$205.1
Viacom	1,116,000	\$411.1	\$190.5	1,049,000	\$416.0	\$181.7	1,139,100	\$406.2	\$155.2
Century Comm.	920,500	\$294.8	\$172.0	939,500	\$311.2	\$181.5	1,022,500	\$321.7	\$174.5
Cablevision Industries	904,648	\$364.0	\$175.7	957,508	\$397.0	\$191.6	1,001,927	\$408.3	\$189.5
Adelphia Comm.	845,640	\$296.6	\$169.9	868,195	\$318.3	\$177.7	957,954	\$347.6	\$184.4
Providence Journal	722,000	\$199.7	\$78.0	738,000	\$281.6	\$114.1	771,000	\$285.0	\$112.0
Telecable Corp	690,000	\$268.4	\$116.4	717,000	\$286.7	\$123.8	751,000	\$302.0	\$131.0
EW Scripps	673,100	\$238.1	\$101.2	701,000	\$251.8	\$105.3	739,200	\$255.4	\$97.1
KBLCOM	577,000	\$235.3	\$95.0	605,000	\$244.1	\$95.7	690,000	\$255.8	\$99.7
Lenfest Comm.	477,130	\$166.1	\$83.4	550,703	\$197.6	\$100.5	577,377	\$212.8	\$105.7
Washington Post	463,000	\$174.1	\$77.5	482,000	\$185.7	\$81.9	498,000	\$182.1	\$80.5
TCA Cable TV Inc	442,356	\$141.9	\$70.4	457,061	\$154.9	\$77.7	468,662	\$166.3	\$81.9
Multimedia Inc	410,000	\$144.4	\$73.1	417,000	\$164.6	\$85.5	432,000	\$165.4	\$84.1
C-TEC Corp	218,000	\$85.3	\$40.9	258,000	\$93.6	\$44.3	273,000	\$95.1	\$44.6
Marcus Cable	138,274	\$38.3	\$20.0	141,323	\$52.3	\$26.8	222,735	\$64.7	\$31.1
Gaylord Entertainment	166,800	\$78.8	\$32.0	175,800	\$81.1	\$32.9	182,800	\$85.2	\$35.5
Summit Comm.	150,400	\$59.6	\$35.8	157,000	\$61.2	\$37.4	165,000	\$62.9	\$37.4
Insight Comm.	133,816	\$47.0	\$20.5	142,327	\$51.0	\$24.5	153,523	\$52.8	\$25.6
Mercom Inc.	34,118	\$12.0	\$4.8	34,714	\$12.6	\$5.1	37,324	\$12.9	\$5.1
Total for Group	34,453,370	\$12,407.2	\$5,703.5	35,777,866	\$14,029.0	\$6,417.5	38,958,736	\$14,441.6	\$6,348.8
Total Per Subscriber		\$374.75	\$172.27		\$399.51	\$182.75		\$386.47	\$169.90
Cash Flow Margin			46.0%			45.7%			44.0%
Total for Industry	55,200,000	\$20,349.1	\$9,354.4	57,200,000	\$22,452.5	\$10,270.8	59,700,000	\$22,588.9	\$9,930.6
% Change From Previous Year				3.6%	10.3%	9.8%	4.4%	0.1%	-3.3%

Notes:

- Operators are listed in descending order by size according to 1994 year end subscribers.
- The companies listed include 15 of the top 20 MSOs (According to Paul Kagan Assoc., Inc., *Top 100 Cable System Operators*, The Cable TV Financial Databook, July 1995, at 14) plus 9 of MSOs ranked 21st through 50th. Of the five, top 20 MSOs excluded, three (Newhouse Broadcasting, Sammons Communications, and Crown Media) were excluded because they do not provide publicly available information and two (Jones Intercable and Falcon Cable TV) were excluded because their corporate

¹ The term cash flow is used in Tables 7 and 9 to refer to the measurement of earnings before accounting for interest payments, taxes, depreciation and amortization ("EBITDA").

structure make it difficult to find the necessary data.

- Except as noted, all data are for fiscal years ending on December 31 of each year. Century Communications' year end subscriber totals, and Adelphia Communications' year end 1992 subscriber totals are estimated. TCA Cable TV's revenue and cash flow data are for the 12 months ending on January 31 of each year. Century Communications's revenue and cash flow data are for the 12 months ending on November 30 of each year. Adelphia Communications revenue and cash flow data are for the 12 months ending on December 31 of each year.
- Wherever possible, subscriber totals include both wholly owned and consolidated cable subscribers.
- Total for Industry estimates for revenue and cash flow were calculated by multiplying the Total for Group of each figure by the ratio of average industry subscribers to average group subscribers.

Sources:

- Unless otherwise noted, all company data obtained from the companies' public filings at the United States Securities and Exchange Commission.
- The subscriber totals for Telecable are from: Paul Kagan Assocs., Inc., *Top 100 Cable System Operators*, The Cable TV Financial Databook, July 1995, at 14; Paul Kagan Assocs., Inc., *Top 100 Cable System Operators*, The Cable TV Financial Databook, June 1994, at 14; and Paul Kagan Assocs., Inc., *Top 100 Cable System Operators*, The Cable TV Financial Databook, June 1993, at 12.
- In order to adjust for Tele-Communications, Inc.'s DBS holdings, its revenue and cash flow data for 1993 and 1994 are from: Richard Bilotti, *Tele-Communications - TCI Group Revenue and Operating Cash Flow Comparisons*, Morgan Stanley, Cable Television Metamorphosis - The Arrival of DBS and RBOC Competition, September 15, 1995, at 61.
- Total for Industry subscribers are from: Paul Kagan Assocs., Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5.

TABLE 8
Quarterly Revenue for Cable System Operators: 1993 - 1995
(\$ in million)

Operator	1993				1994				1995	
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
Tele-Communications	\$1,018.0	\$1,042.0	\$1,044.0	\$1,049.0	\$1,060.0	\$1,081.0	\$1,072.0	\$1,105.0	\$1,169.0	\$1,262.0
Time Warner Inc	\$546.0	\$560.0	\$551.0	\$551.0	\$551.0	\$560.0	\$552.0	\$579.0	\$578.0	\$760.0
Comcast	\$271.6	\$278.9	\$272.8	\$269.3	\$260.6	\$267.0	\$265.6	\$272.0	\$347.0	\$362.5
Cox Communications	\$285.2	\$295.4	\$296.1	\$302.6	\$304.3	\$307.4	\$303.5	\$319.1	\$313.1	\$328.1
Continental Cablevision	\$287.5	\$297.2	\$295.5	\$296.9	\$294.4	\$295.0	\$296.2	\$312.4	\$318.6	\$331.5
Cablevision Systems	\$157.0	\$168.2	\$169.6	\$172.0	\$176.1	\$192.1	\$223.5	\$245.5	\$245.4	\$263.7
Adelphia Comm.	\$79.3	\$79.7	\$79.4	\$79.9	\$80.1	\$84.0	\$90.8	\$92.7	\$94.0	\$96.9
Cablevision Industries	\$97.5	\$100.4	\$100.5	\$98.6	\$100.0	\$101.7	\$103.0	\$103.7	\$103.6	\$106.4
Viacom	\$104.5	\$107.5	\$103.7	\$100.3	\$100.7	\$103.5	\$100.4	\$101.6	\$106.0	\$110.0
Century Comm.	\$74.3	\$77.3	\$78.5	\$81.1	\$78.6	\$80.3	\$79.9	\$82.8	\$84.2	\$84.5
EW Scripps	\$63.2	\$63.7	\$62.6	\$62.3	\$62.4	\$63.3	\$63.9	\$65.8	\$67.0	\$69.8
TCA Cable TV Inc	\$37.8	\$38.3	\$39.5	\$39.3	\$39.8	\$41.1	\$42.1	\$43.3	\$44.0	\$49.1
Multimedia Inc	\$41.0	\$41.5	\$41.0	\$41.1	\$41.2	\$42.0	\$40.9	\$41.3	\$41.9	\$43.6
Marcus Cable	\$12.7	\$13.3	\$13.1	\$13.2	\$13.2	\$12.8	\$17.7	\$20.9	\$37.0	\$38.5
Summit Comm.	\$15.1	\$15.3	\$15.3	\$15.5	\$15.6	\$15.8	\$15.6	\$15.9	\$16.2	\$0.0
Insight Comm.	\$12.7	\$12.8	\$12.8	\$12.7	\$13.0	\$13.1	\$13.2	\$13.5	\$13.8	\$14.3
Total for Group	\$3,103.5	\$3,191.5	\$3,175.4	\$3,184.7	\$3,191.0	\$3,260.1	\$3,280.4	\$3,414.5	\$3,578.7	\$3,920.8
Total for Industry	\$5,512.0	\$5,667.9	\$5,639.7	\$5,654.4	\$5,570.3	\$5,599.4	\$5,626.9	\$5,814.9	\$5,883.9	\$6,183.3
% Change From Previous Year's Quarter					1.1%	-1.2%	-0.2%	2.8%	5.6%	10.4%

- Notes:
- Operators are listed in descending order by size according to: Paul Kagan Assoc., Inc., *Top 100 Cable System Operators as of June 30, 1995*, Cable TV Investor, August 31, 1995, at 9.
 - The companies listed include 12 of the top 20 MSOs (According to Paul Kagan Assoc., Inc., *Top 100 Cable System Operators*, The Cable TV Financial Databook, July 1995, at 14) plus four of MSOs ranked 21st through 50th. Of the eight, top 20 MSOs excluded, six (Newhouse Broadcasting, Sammons Communications, Crown Media, the Providence Journal, Telecable Corp, and Lenfest Communications) were excluded because they do not provide publicly available quarterly information and two (Jones Intercable and Falcon Cable TV) were excluded because their corporate structure make it difficult to find the necessary data.
 - Except as noted, all data are for quarters ending March 31, June 30, September 30, and December 31. TCA Cable TV's revenue and cash flow data are for quarters ending April 30, July 31, October 31, and January 31. Century Communications's revenue and cash flow data are for quarters ending February 28, May 31, August 31, and November 30.
 - Total for Industry estimates for revenue and cash flow were calculated by multiplying the Total for Group of each figure by the ratio of the total subscribers for the industry to the total subscribers for the group (not shown).
 - Cox Communication's data are pro forma data combining Cox Communications and Times Mirror's cable revenue and cash flow.
 - Tele-Communications, Inc.'s revenue and cash flow data from the second quarter of 1994 to the second quarter of 1995 are for TCI Communications, Inc..

Sources:

- All company data obtained from the companies public filings at the United States Securities and Exchange Commission.

TABLE 9
Quarterly Cash Flow for Cable System Operators: 1993 - 1995
(\$ in million)

Operators	1993				1994				1995	
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
TCI	\$467.0	\$472.0	\$464.0	\$449.0	\$450.0	\$452.0	\$423.0	\$480.0	\$498.0	\$518.0
Time Warner Inc	\$255.0	\$270.0	\$268.0	\$242.0	\$244.0	\$256.0	\$242.0	\$247.0	\$256.0	\$319.0
Comcast	\$136.8	\$142.0	\$137.5	\$135.7	\$127.0	\$130.0	\$129.0	\$131.9	\$165.0	\$182.6
Cox Communications	\$123.0	\$129.4	\$125.1	\$129.0	\$121.8	\$123.4	\$109.3	\$119.0	\$122.8	\$125.5
Continental Cable	\$129.5	\$135.2	\$130.2	\$132.6	\$133.2	\$128.8	\$127.7	\$135.4	\$136.5	\$138.4
Cablevision Systems	\$63.8	\$67.2	\$68.7	\$52.6	\$75.9	\$80.9	\$93.5	\$83.7	\$96.4	\$87.9
Adelphia Comm.	\$44.2	\$44.5	\$44.4	\$44.5	\$42.2	\$44.4	\$49.0	\$48.7	\$48.9	\$51.5
Cablevision Industries	\$47.3	\$48.9	\$49.5	\$45.9	\$47.4	\$47.5	\$48.2	\$46.4	\$48.0	\$49.7
Viacom	\$48.9	\$49.4	\$44.1	\$39.3	\$40.2	\$40.8	\$36.5	\$37.7	\$42.3	\$45.0
Century Comm.	\$41.9	\$46.4	\$46.4	\$46.8	\$46.9	\$44.2	\$41.5	\$41.9	\$39.8	\$38.3
EW Scripps	\$28.0	\$27.2	\$24.9	\$25.1	\$24.3	\$23.1	\$24.3	\$25.5	\$27.2	\$29.0
TCA Cable TV Inc	\$19.6	\$19.4	\$19.1	\$19.5	\$19.1	\$20.2	\$20.8	\$21.8	\$21.8	\$24.1
Multimedia Inc	\$21.3	\$21.3	\$21.2	\$21.6	\$21.3	\$21.5	\$20.2	\$21.2	\$20.8	\$22.6
Marcus Cable	\$6.5	\$7.0	\$6.8	\$6.5	\$6.5	\$5.8	\$8.5	\$10.4	\$18.4	\$19.3
Summit Comm.	\$9.3	\$9.4	\$9.3	\$9.4	\$10.7	\$9.4	\$9.2	\$8.1	\$9.7	\$0.0
Insight Comm.	\$6.0	\$5.9	\$6.1	\$6.5	\$6.3	\$6.2	\$6.4	\$6.7	\$6.7	\$7.0
Total for Group	\$1,447.9	\$1,495.2	\$1,465.5	\$1,406.2	\$1,416.7	\$1,434.2	\$1,389.2	\$1,465.4	\$1,558.2	\$1,657.9
Total for Industry	\$2,571.6	\$2,655.4	\$2,602.7	\$2,496.6	\$2,473.1	\$2,463.2	\$2,382.8	\$2,495.5	\$2,561.9	\$2,614.6
% Change From Previous Year's Quarter					-3.8%	-7.2%	-8.4%	0.0%	3.6%	6.1%

Notes:

- Operators are listed in descending order by size according to: Paul Kagan Assoc., Inc., *Top 100 Cable System Operators as of June 30, 1995*, Cable TV Investor, August 31, 1995, at 9.
- The companies listed are the same MSOs described in Table 8 above.
- Except as noted, all data are for quarters ending March 31, June 30, September 30, and December 31. TCA Cable TV's revenue and cash flow data are for quarters ending April 30, July 31, October 31, and January 31. Century Communications's revenue and cash flow data are for quarters ending February 28, May 31, August 31, and November 30.
- Total for Industry estimates for revenue and cash flow were calculated by multiplying the Total for Group of each figure by the ratio of the total subscribers for the industry to the total subscribers for the group (not shown).
- Cox Communication's data from the first quarter of 1993 to the first quarter of 1995 are pro forma data combining Cox Communications and Times Mirror's cable revenue and cash flow.
- Tele-Communications, Inc.'s revenue and cash flow data from the second quarter of 1994 to the second quarter of 1995 are for TCI Communications, Inc..

Sources:

- All company data obtained from the companies public filings at the United States Securities and Exchange Commission.

TABLE 10
Acquisition and Disposition of Capital: 1988 - 1994
(\$ in million)

Year	Private Debt		Public Debt		Private Equity		Public Equity		Total Capital Raised From Financing Sources
	Sum Raised	% of Total	Sum Raised	% of Total	Sum Raised	% of Total	Sum Raised	% of Total	
1988	\$5,078	67%	\$1,789	23%	\$678	9%	\$68	1%	\$7,613
1989	\$6,494	80%	\$840	10%	\$726	9%	\$108	1%	\$8,168
1990	\$4,637	81%	\$490	9%	\$597	10%	\$0	0%	\$5,724
1991	\$689	16%	\$912	22%	\$1,290	30%	\$1,350	32%	\$4,241
1992	(\$1,762)	-69%	\$2,400	93%	\$1,710	67%	\$220	9%	\$2,568
1993	(\$3,583)	-186%	\$5,280	274%	\$62	3%	\$165	9%	\$1,924
1994	\$4,772	71%	\$1,089	16%	\$409	6%	\$461	7%	\$6,731
Total: 1988 Share of 7 Year Total	\$16,325	44%	\$12,800	35%	\$5,472	15%	\$2,372	6%	\$36,969
Average Raised Per Year	\$2,332		\$1,829		\$782		\$339		\$5,281

Sources:

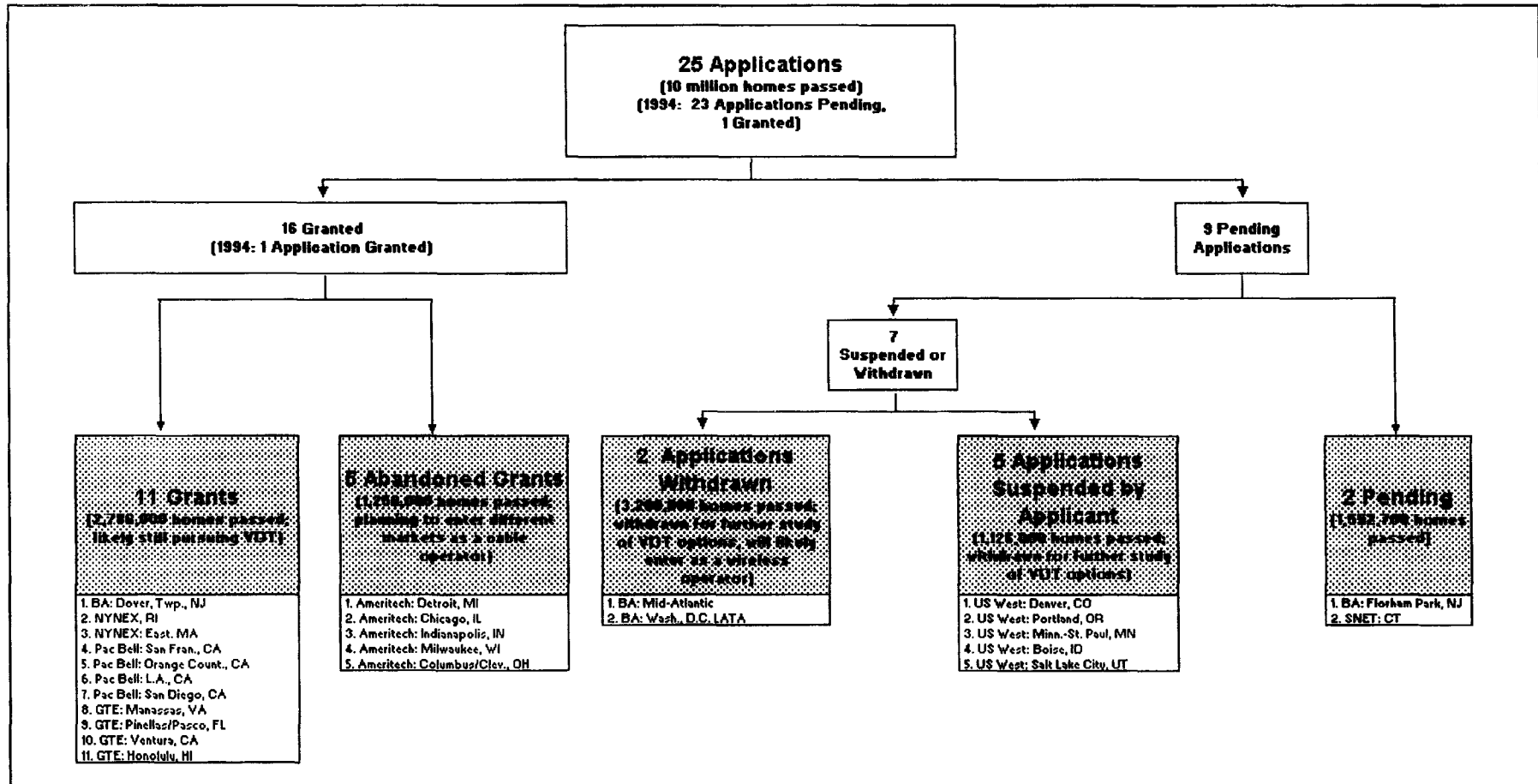
- 1988 - Paul Kagan Assoc., Inc., *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook, June 1992, at 88.
- 1989 - Paul Kagan Assoc., Inc., *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook, June 1993, at 86.
- 1990 - Paul Kagan Assoc., Inc., *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook, June 1994, at 92.
- 1991 to 1994 - Paul Kagan Assoc., Inc., *Estimated Capital Flows in Cable TV*, The Cable TV Financial Databook, July 1995, at 92.

TABLE 11
System Transactions: 1993 - 1994

	1993	1994	1/95 to 7/95	93-94 Change
Number of Systems Sold	96	64	63	-33.3%
Total Number of Subscribers	3,852,668	7,504,177	7,267,681	94.8%
Average System Size	40,132	117,253	115,360	192.2%
Number of Homes Passed	6,616,887	12,492,997	11,386,320	88.8%
Avg. # of Homes Passed	68,926	195,203	180,735	183.2%
Total Dollar Value	\$8,322.6	\$14,025.3	\$13,485.8	68.5%
Average Dollar Value	\$86.7	\$219.1	\$214.1	152.8%
Value Per Home Passed	1,258	1,123	1,184	-10.7%
Dollar Value Per Subscriber	2,160	1,869	1,856	-13.5%
Cash Flow Multiple	11.3	10.3	9.6	-8.8%

Source: Paul Kagan Assoc., Inc., *Year-To-Date Cable System Sale Summary*, Cable TV Investor, January 31, 1995, at 8.

APPENDIX C-1: Status of LEC Entry Status of LEC Entry Since the 1994 Report



* The cities listed above represent the markets the LECs were planning to enter as VDT operators at the time of the 1994 Report; for some, current plans are different. The table on the following page lists the status of each LEC's plan in regard to the above applications.

** Four additional permanent VDT applications were filed by U S West since the 1994 Report. All were dismissed without prejudice to refile (due to lack of information) and are ignored above.

APPENDIX C-2: Status of LEC Entry

Company	Location of VDT Applications	Status of VDT Applications	Mode of Entry: Homes Passed in Current Plan
Bell Atlantic	Dover Township, NJ	Approved: System construction near completion; operation to begin before end of year.	VDT: 38,000
NYNEX	RI; Eastern MA	Approved: Planning or just beginning VDT system construction; planning to use wireless technology for video delivery in near term.	VDT: 397,000
PAC BELL	San Fran., Orange Count., L.A., San Diego, CA	Approved: Will complete San Fran. VDT construction in 1996. Slowing wire based build out in other 3 markets, to be completed in 1997. Will use wireless for video delivery in near term.	VDT: 490,000 in San Fran. by 1996; to pass another 510,000 in other 3 areas by 1997 (total of 1 million, down from 1.3 million in applications). Wireless: Pass as many as 5 million by 1996.
GTE	Manassas, VA; Pinellas/Pasco, FL; Ventura, CA; Honolulu, HI	Approved: Planning or just beginning system construction.	VDT: 1,041,000
Ameritech	Detroit, MI; Chicago, IL; Indianapolis, IN; Milwaukee, WI; Columbus/Clev., OH	Approved: Abandoned granted applications. Signed cable franchise agreements in Plymouth and Canton Townships, Northville, and Plymouth, MI; Columbus, OH; and Glendale Heights, IL. Pursuing additional midwest cable franchises.	VDT: None; under withdrawn applications, Ameritech was approved to pass 1,256,000. Cable: Unknown.
Bell Atlantic	Mid-Atlantic; Wash., D.C. LATA	Withdrawn: Planning to use wireless for video delivery in northeast and mid-Atlantic markets in near term while studying wire based options.	VDT: None; under withdrawn applications, Bell Atlantic proposed to pass 3.2 million. Wireless: 4,038,000.
U S West	Denver, CO; Portland, OR; Minn.-St. Paul, MN; Boise, ID; Salt Lake City, UT	Suspended at Request of Applicant: Studying wire based options and awaiting results from Omaha, NE trial.	VDT: Suspended applications sought approval to pass 1,126,000.
Bell Atlantic	Florham Park, NJ	Pending.	VDT: 11,700
SNET	CT	Pending.	VDT: 1,541,000

APPENDIX D

Local Exchange Carrier Proposals

<i>Date First Filed</i>	<i>Telephone Company</i>	<i>Location</i>	<i>Homes Passed</i>	<i>Type of Proposal</i>	<i>Status</i>
10/21/92	Bell Atlantic-VA	Northern VA	2,000	technical/ market ¹	approved, 3/25/93; expanded, 1/20/95
10/30/92	NYNEX	New York, NY	2,500	technical	approved, 6/29/93
11/16/92	New Jersey Bell	Florham Park, NJ	11,700	permanent	pending
12/15/92	New Jersey Bell	Dover Township, NJ	38,000	permanent	approved, 7/18/94
4/27/93	SNET	West Hartford, CT	1,600	technical/ market	approved, 11/12/93
6/18/93	Rochester Telephone	Rochester, NY	120	technical/ market	approved, 3/25/94
6/22/93	U S West	Omaha, NE	2,500 or 60,000 ²	technical/ market	approved, 12/22/93
12/15/93	SNET (amended)	Hartford & Stamford, CT	150,000	technical/ market expansion	approved, 11/22/94
12/16/93	Bell Atlantic	Wash., D.C. LATA	300,000	permanent	see 6/16/94 filing
12/20/93	Pacific Bell	Orange Co., CA	210,000	permanent	approved, 7/19/95
12/20/93	Pacific Bell	So. San Francisco Bay, CA	490,000	permanent	approved, 7/19/95
12/20/93	Pacific Bell	Los Angeles, CA	360,000	permanent	approved, 7/19/95
12/20/93	Pacific Bell	San Diego, CA	250,000	permanent	approved, 7/19/95

¹ A technical trial tests the technical feasibility of a VDT network, usually without charging customers for access to the network. A market trial charges either programmer-customers, end-user subscribers, or both for access, and is designed to test customer willingness to pay for that access. Both types of trials may be combined into one.

² The technical phase of the trial was authorized to pass 2,500 homes; the market phase of the trial expanded the technical trial and is authorized to pass 60,000 homes (thus far, U S West reports serving 5,000 homes).

<i>Date First Filed</i>	<i>Telephone Company</i>	<i>Location</i>	<i>Homes Passed</i>	<i>Type of Proposal</i>	<i>Status</i>
1/10/94	U S West	Denver, CO	357,000	permanent	suspended by applicant, 5/31/95
1/19/94	U S West	Portland, OR	162,000	permanent	suspended by applicant, 5/31/95
1/19/94	U S West	Minneapolis/ St. Paul, MN	357,000	permanent	suspended by applicant, 5/31/95
1/31/94	Ameritech	Detroit, MI	232,000	permanent	approved, 1/4/95; abandoned by applicant, June 27, 1995
1/31/94	Ameritech	Columbus & Cleveland, OH	262,000	permanent	approved, 1/4/95; abandoned by applicant, June 27, 1995
1/31/94	Ameritech	Indianapolis, IN	115,000	permanent	approved, 1/4/95; abandoned by applicant, June 27, 1995
1/31/94	Ameritech	Chicago, IL	501,000	permanent	approved, 1/4/95; abandoned by applicant, June 27, 1995
1/31/94	Ameritech	Milwaukee, WI	146,000	permanent	approved, 1/4/95; abandoned by applicant, June 27, 1995
3/16/94	U S West	Boise, ID	90,000	permanent	suspended by applicant, 5/31/95
3/16/94	U S West	Salt Lake City, UT	160,000	permanent	suspended by applicant, 5/31/95
4/13/94	Puerto Rico Tel. Co.	Puerto Rico	250	technical	approved, 12/5/94
5/23/94	GTE - Contel of VA	Manassas, VA	109,000	permanent	approved, 5/2/95
5/23/94	GTE FL Inc.	Pinella and Pasco Co., FL	476,000	permanent	approved, 5/2/95
5/23/94	GTE CA Inc	Ventura Co., CA	122,000	permanent	approved, 5/2/95
5/23/94	GTE HI Tel. Co.	Honolulu, HI	334,000	permanent	approved, 5/2/95

<i>Date First Filed</i>	<i>Telephone Company</i>	<i>Location</i>	<i>Homes Passed</i>	<i>Type of Proposal</i>	<i>Status</i>
6/16/94	Bell Atlantic (amended)	Wash., D.C. LATA	1.2 mil.	permanent	suspended by applicant, 4/25/95; withdrawn, 5/24/95
6/16/94	Bell Atlantic	Mid-Atlantic	2 mil.	permanent	suspended by applicant, 4/25/95; withdrawn, 5/24/95
6/27/94	BellSouth	Chamblee & DeKalb Co., GA	12,000	technical/ market	approved, 2/8/95
7/8/94	NYNEX	RI	63,000	permanent	approved, 3/6/95
7/8/94	NYNEX	MA	334,000	permanent	approved, 3/6/95
9/9/94	Sprint/ Carolina Tel. & Tel. Co.	Wake Forest, NC	1,000	technical/ market	approved, 12/28/94
11/16/94	U S West	Cedar Rapids, IA	63,000	permanent	dismissed
11/16/94	U S West	Colorado Springs, CO	161,000	permanent	dismissed
11/16/94	U S West	Des Moines, IA	120,000	permanent	dismissed
11/16/94	U S West	Albuquerque, NM	214,000	permanent	dismissed
4/28/95	SNET	CT	1.5 mil.	permanent	pending

APPENDIX E

Status of VDT Technical and Market Trials

1. This Appendix summarizes the various LEC filings concerning VDT technical and market trials. These filings include trial applications, trial compliance reports, permanent applications, and tariffs. Since the *1994 Report*, there have been filed with the Commission two more six-month trial reports, three one-year reports, and four additional tariffs, including Bell Atlantic's tariff for permanent commercial service in Dover Township, New Jersey.

Applications and Tariffs for Technical and Market Trials

2. Bell Atlantic -- Northern Virginia Technical and Market Trial. Authority for the first technical VDT trial was granted on March 25, 1993, to Chesapeake and Potomac Telephone of Virginia (now, Bell Atlantic - Virginia) for a one-year technical trial with up to 400 (employee) subscribers in Arlington, Virginia, to test Asymmetric Digital Subscriber Line ("ADSL") technology.¹ *Chesapeake and Potomac Telephone Company of Virginia*, 8 FCC Rcd 2313 (1993). Bell Atlantic has filed two six-month reports on its technical trials, as required by its authorization.

3. The first six-month report covers the first phase of the technical trial, during which equipment was installed in a limited number of Bell Atlantic employee homes (61) in order to test technical viability and integration of the network. Some problems were experienced with the prototype video decoder, but all such problems were resolved by September 15, 1993. *Six Month Compliance Report of Bell Atl. Co., Bell Atl. No. Va. VDT Application*, File No. WPC-6834 (filed September 23, 1993).

4. The second six-month report covers phase two of the technical trial. During this phase, 268 Bell Atlantic employees participated in the trial, which tested the participants' reactions to the service and the technical feasibility of the service in a variety of network environments. *Second Six Month Compliance Report of Bell Atl. Co., Bell Atl. No. Va. VDT Application*, File No. WPC-6834 (filed October 24, 1994). Bell Atlantic reports that participants averaged 2.6 hours of use of the service per week. It also reports that the number of problems reported increased with the increased number of participants in the trial. However, the report indicates that participants believe that the service is better than comparable media (cable, VCR, and broadcast) and is easy to use. In addition, Bell Atlantic states that the number of technical problems will be reduced with new software and hardware, and with better training of installation technicians. Over the course of the trial, Bell Atlantic

¹ ADSL permits Motion Picture Experts Group One ("MPEG-1") compressed digital video signals to be transmitted on an on-demand basis over existing copper loops. Customer-programmers will have a 1.5 Megabits per second ("Mbps") channel downstream and a 16 Kilobits per second ("Kbps") channel upstream. *Bell Atlantic Tariff FCC No. 10, Transmittal No. 742*, at 1.0.

was able to reduce by two-thirds the number of problems reported by participants. *Id.*

5. Subsequent to the technical trial grant, Bell Atlantic requested and was granted (on January 20, 1995) permission to extend the technical trial into a market trial and to expand the market trial to 2,000 subscribers. See *Chesapeake and Potomac Telephone Company of Virginia ("Bell Atlantic No. Va. VDT Application")*, 10 FCC Rcd 2975 (1995). For the market phase of this trial, Bell Atlantic filed a tariff with the Commission on January 27, 1995. *Bell Atlantic Tariff* FCC No. 10, Transmittal No. 742. The tariff reports that the market trial will last for six months, subject to possible extension, and is designed to test ADSL, the costs associated with it, and the willingness of both customer-programmers and end-user subscribers to pay for it. Month-to-month and non-recurring charges for customer-programmers and for end-user subscribers are reported.²

6. NYNEX -- Manhattan Technical Trial. Authority for the second technical trial was granted to New York Telephone ("NYNEX") on June 29, 1993, for a one-year trial to test an HFC network, video switching technologies and methods for storing and delivering video programming in three multiple-dwelling unit ("MDU") buildings serving 2,500 subscribers in New York City. *New York Telephone Co. for Section 214 Auth. to Provide VDT Servs. in New York City ("NYNEX New York VDT Application")*, 8 FCC Rcd 4325 (1993).

7. NYNEX has submitted two six-month reports to the FCC as required by its authorization. The first one reports "spirited competition" between its customer-programmers, particularly Liberty Cable and Time Warner Cable. *Six Month Compliance Report of NYNEX, NYNEX New York VDT Application*, File No. WPC 6836 (filed July 15, 1994). The second report states that the VDT platform was successful at delivering programming from customer-programmers to end-user subscribers, consisting of switched-access for delivering live video programming, and analog stored video for interactive programming. Analog stored video allows end-user subscribers to fast-forward, rewind, pause, and stop. *Second Six Month Compliance Report of NYNEX, NYNEX New York VDT Application*, File No. WPC 6836 (filed February 10, 1995). NYNEX blames its continued holdup in adding digital capacity to its system on equipment delays. NYNEX hopes to test digital equipment sometime this year. *Id.*

8. SNET -- West Hartford and Stamford Areas Technical and Market Trial. Southern New England Telephone Company ("SNET") was granted authorization on November 12, 1993, for a technical and market trial to serve between 200 and 1,600 customers in West Hartford, Connecticut and to test Fiber to the Node ("FTTN") architecture with coaxial facilities from the node to individual subscribers. *Southern New England Telephone Co. for Section 214 Auth. to Provide CDT Servs. in West Hartford, Conn. ("SNET*

² For instance, customer-programmers pay a \$12.00 monthly connection fee, and end-user subscribers pay \$7.50. Bell Atlantic is waiving all non-recurring charges (such as a \$70.00 end-user subscriber charge) during the market trial service period. *Id.* at 7.5.

West Hartford VDT Application"), 9 FCC Rcd 1019 (1993).

9. Shortly after gaining approval for the technical and market trial, SNET requested an authorization to expand the trial to pass 151,000 homes (*Southern New England Telephone Company*, Order and Authorization, 9 FCC Rcd 7715 (1994)), which was approved on November 22, 1994. A tariff was filed because SNET intends to charge subscribers and customer-programmers for the service to test interest and willingness to pay for services available from the VDT platform. *Southern New England Telephone Company, Tariff F.C.C. No. 40, Transmittal No. 641* (filed June 27, 1995).

10. According to the tariff, SNET intends to provide video service to two service areas, northern Connecticut (passing 76,000 homes in the cities of West Hartford, New Britain, Farmington, and Hartford) and southern Connecticut (passing 75,000 homes in the cities of Stamford, Norwalk, Darien, Westport, and Fairfield). Customer-programmers will be able to request service in either area or both, and will be charged monthly according to the average number of subscribers each month times the Broadcast Connect Rate per 6MHz channel.³ At first, SNET plans to offer 53 analog channels and 23 channels of analog Enhanced Pay-per-View ("EPPV"). In addition, in the northern service area, SNET proposes to provide Video-On-Demand ("VOD"), which will become available to both service areas when the digital upgrade is deployed. SNET's projection for digital services predicts zero digital channels in year one, 40 digital channels in year two, and 200 digital channels in year three and beyond. SNET plans to file a digital tariff during the third quarter of 1995. *Id.*

11. Despite the authorization to build out the system further, SNET's two six-month trial reports indicate that SNET has not yet expanded the VDT system. *First Six Month Compliance Report of SNET, SNET West Hartford VDT Application*, File No. WPC 6858 (filed December 22, 1994), *Second Six Month Compliance Report of SNET, SNET West Hartford VDT Application*, File No. WPC 6858 (filed June 1, 1995). Both report that the system is a Hybrid Fiber-Coaxial ("HFC") network which offers VOD, pay-per-view, and aggregated channel services to 1,250 homes. *Id.* As of March 31, 1995, 58 video information providers were supplying programming, and 340 end-user subscribers were connected to the system. SNET reports that it is pleased with the operation of the system and that the trial demonstrates that it is feasible to deliver video signals over an advanced telecommunications network. *Second Six Month Compliance Report of SNET, SNET West Hartford VDT Application*, File No. WPC 6858 (filed June 1, 1995).

12. U S West -- Omaha, NE Technical and Market Trial. On December 22, 1993, U S West was granted an authorization for technical and market trials in Omaha, Nebraska. The technical trial lasted six months and passed 2,500 homes. *U S West Communications*,

³ The Broadcast Connect Rate per 6 MHz channel is \$0.10. Customer-programmers using less bandwidth will be charged according to a pro rata share of the 6 MHz. *Southern New England Telephone Company, Tariff F.C.C. No. 40, Transmittal No. 641* (filed June 27, 1995).

Inc. for Section 214 Auth. to Provide VDT Servs. in Omaha, Neb., 9 FCC Rcd 184 (1993). The market trial will last for the twelve months following the technical trial and will pass 50,000 homes. U S West will use an advanced fiber-to-the-curb/coaxial cable network capable of providing 77 channels of analog video with forward-path-only signaling, and up to 800 channels of digital video with forward- and/or reverse-path signalling capability. Sixty-four analog channels will have interdigitation capabilities, which means that the customer-programmers can use them to provide pay-per-view services. *U S West Communications*, Tariff FCC No. 5, Transmittal No. 657 (filed August 8, 1995), at Section 1.3. U S West will also allow customer-programmers to offer digital VOD services. *Id.* at Section 1.5.6. US West estimates a residential penetration rate of 28% for the trial. *Id.* at Section 2.1.2.⁴

13. Rochester Telephone -- Rochester Technical Trial. Authority for the fifth authorized trial was granted on March 25, 1994, to Rochester Telephone Co., for six months, to conduct a tariffed field test to serve up to 120 subscribers using two architectures: a fiber-coax system within multi-unit and single-unit dwellings, and an ADSL system utilizing Discrete Multi-Tone technology within a defined two-mile area. *Rochester Tel. Corp. for Section 214 Auth. to Provide VDT Servs. in Rochester N.Y. ("Rochester Tel. VDT Application")*, 9 FCC Rcd 2285 (1994). Rochester Telephone filed a tariff prior to commencement of its trial because it intended to charge both customer-programmers and end-user subscribers for its VDT service. *Rochester Telephone Corporation*, Tariff FCC No. 3, Transmittal No. 224 (filed May 17, 1994).⁵

14. Rochester Telephone also filed, on March 1, 1995, a compliance report on the status of the trial. *Six Month Compliance Report of Rochester Telephone, Rochester Tel. VDT Application*, File No. WPC 6867 (filed March 1, 1995). Rochester Telephone reported that, although it had received *pro forma* authorization to extend its trial for an additional three-month period until June 30, 1995,⁶ it and its sole customer-programmer, USA Video, had decided that continuation of the trial did not make financial sense. Thus, in January 1995, USA Video ceased providing service to end-user customers, but the VDT platform remained available for service until the tariff expired. *Id.* Rochester Telephone also stated that, due to

⁴ U S West submitted an attachment to its Omaha tariff that reported the results of surveys in the major cities that U S West serves. These surveys indicate "...that in a scenario in which two video providers offered comparable service offerings, 51% of households with access to the two providers would subscribe to the local cable TV provider's offering and 23% would be customers of U S West's video services offerings. Overall, cable penetration of homes with access to two providers would increase from approximately 60% today to 74%." *U S West Omaha Tariff, Exhibit A*, at page 2.

⁵ The tariff expired on June 30, 1995.

⁶ See Letter from James D. Schlichting to Michael J. Shortley, III and Charles A. Zielinski (Oct. 11, 1994).

technical constraints, it never performed the ADSL portion of its trial.⁷ Despite these difficulties, Rochester reported that the trial was a success in technical terms, and that it had gained substantial knowledge from the trial. *Id.*

15. Puerto Rico Telephone Company -- Technical Trial. Authorization for the sixth authorized trial was granted, on December 5, 1994, to the Puerto Rico Telephone Company for a one-year technical trial authorization to serve 250 homes using Fiber-to-the-Curb ("FTTC") and 18 schools and 12 business offices using ADSL network architecture. *Puerto Rico Telephone Co.*, File No. WPC-6949 (1994). The trial proposed initial deployment of 64 analog video channels over the FTTC system, with future enhancement through digital compression to 384 channels.

16. BellSouth -- DeKalb County and Chamblee, Georgia Technical Trial. Authorization for the seventh trial was granted, on February 8, 1995, to BellSouth for an 18-month trial to pass 12,000 homes in DeKalb County and Chamblee, Georgia for the purpose of testing an HFC network offering both traditional channel service with 60 analog channels and a digital VDT platform with approximately 300 channels utilizing both digital multi-cast and digital point-cast. *BellSouth*, File No. WPC-6977 (1995). Digital multi-cast entails distribution of a digital video signal to everyone who subscribes, while digital point-cast is switched digital distribution. BellSouth reported to the Commission, in an April 28, 1995 letter, that 14 customer-programmers had requested more channels than the platform's planned 70 analog broadcast channels, 160 digital broadcast channels, and 480 digital switched channels. BellSouth had tentatively decided, instead of expanding the capacity of the platform, to allocate channels to all applicants on a proportional basis and file a tariff for such allocation. *See* Letter from Michael A. Tanner to Kathleen M. H. Wallman (April 28, 1995).

17. Carolina Telephone and Telegraph Company -- Wake Forest, North Carolina Technical and Market Trial. Authorization for the eighth trial was granted on December 28, 1994 to Carolina Telephone and Telegraph Company for a two-year technical and market trial to 1,000 homes in Wake Forest, North Carolina. *Carolina Telephone and Telegraph Co.*, File No. WPC-6999 (1994). In a subsequent letter, Carolina Telephone and Telegraph Company informed the Commission that three customer-programmers had requested more than the initial 75 analog channel capacity of the system, but that the customer-programmers were satisfied with dividing the 75 channels. *See* Letter from Warren D. Hannah to Kathleen M. H. Wallman (May 2, 1995).

⁷ Rochester Telephone required ADSL technology that was capable of transporting a 6 Mps signal, which was still in its prototype stage at the time of the trial. ADSL technology capable of transmitting 1.5 Mps was commercially available (and was used in Bell Atlantic's Northern Virginia trial, *see* para. 1, above), but was insufficient for Rochester Telephone's needs. *Six Month Compliance Report of Rochester Telephone, Rochester Tel. VDT Application*, File No. WPC 6867 (filed March 1, 1995).

APPENDIX F

Top 20 SMATV Operators (ranked by number of units passed*)

<i>Rank</i>	<i>Company</i>	<i>Number of Properties</i>	<i>Units Passed</i>
1	Interactive Cable Systems	700	230,000
2	OpTel	350	110,000
3	Telesat**	65	81,200
4	Cable Plus***	170	61,291
5	ACS	225	54,000
6	Apollo	160	50,600
7	Mid-Atlantic Cable	74	47,176
8	Interface Communications	60	35,000
9	Eastern Cable Networks (formerly AMSAT)****	70	34,000
10	Liberty Cable	175	30,000
11	Preferred Entertainment	190	30,000
12	Ed Rose & Sons	50	26,000
13	Future Communications	46	20,000
14	MultiTechnology Services	65	18,500
15	Telecom Satellite	50	17,500
16	Wireless Cable of Atlanta	30	12,000
17	Superior Cable	26	10,736
18	Sunshine TV Entertainment	8	10,000
19	Novner Enterprises	23	7,000
20	Coaxial Communications	22	5,800
<i>Total</i>		<i>2,559</i>	<i>890,803</i>

Notes: * Chart does not include data for hospitals, hotels and prisons.

** Includes franchised cable subscribers.

*** Includes MSE Cable.

**** Is now also a wireless cable licensee.

Source: Paul Kagan Assocs. Inc., Private Cable Investor, Dec. 31, 1994, at 5.

APPENDIX G

TABLE 1
Assessment Of Competing Technologies*

<i>Technology Used</i>	<i>Subscribers</i>				
	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>Sept. 1995</i>
TV Households (1)	92,100,000	93,100,000	94,200,000	95,400,000	95,900,000
Pct. Change		1.09%	1.18%	1.27%	0.52%
MVPD Households (2)**	55,309,000	57,530,000	60,283,000	63,936,620	67,475,350
Pct. Change		4.02%	4.79%	6.06%	5.53%
Pct. of Households	60.05%	61.79%	63.99%	67.02%	70.36%
Cable Subs. (3)	53,400,000	55,200,000	57,200,000	59,700,000	61,700,000
Pct. Change		3.37%	3.62%	4.37%	3.35%
Pct. of MVPD Total	96.55%	95.95%	94.89%	93.37%	91.44%
MMDS Subs. (4)	180,000	323,000	397,000	600,000	800,000
Pct. Change		79.44%	22.91%	51.13%	33.33%
Pct. of MVPD Total	0.33%	0.56%	0.66%	0.94%	1.19%
SMATV Subs. (5)***	965,000	984,000	1,004,000	850,000	950,000
Pct. Change		1.97%	2.03%	-15.34%	11.76%
Pct. of MVPD Total	1.74%	1.71%	1.67%	1.33%	1.41%
HSDs Subs. (6)	764,000	1,023,000	1,612,000	2,178,000	2,341,000
Pct. Change		33.90%	57.58%	35.11%	7.48%
Pct. of MVPD Total	1.38%	1.78%	2.67%	3.41%	3.47%
DBS Subs. (7)			< 70,000	602,000	1,675,000
Pct. Change				760.00%	178.24%
Pct. of MVPD Total			0.12%	0.94%	2.48%
VDT (8) Subs. at Trial Sites****				6,620	9,350
Pct. Change					41.24%
Pct. of MVPD Total				0.01%	0.01%
Subs. at Permanent Sites				0	0

Notes: * Totals for 1991-94 are year-end totals unless otherwise indicated. Figures for the earlier years which appeared in the 1994 Report have been revised. Some numbers have been rounded.

 ** The total of MVPD Households is likely somewhat lower than the given figure due to households subscribing to the services of more than one MVPD. See e.g. 1994 Report, 9 FCC Rcd. at 7480, Para. 74. The number of such households is likely low, however, so the given total can be seen as a reasonable estimate of the number of MVPD households.

 *** The SMATV subscriber count was revised downward to reflect revised totals produced by changes in the methodology used by Paul Kagan Associates, Inc. Paul Kagan did not revise back for earlier years.

 **** Total for Oct. 1994.

- Sources:
- (1) United States television households: 1991-94 from A.C. Nielsen Co. as of January of the following year cited by Veronis, Suhler & Associates, *Homes Passed by Cable and Incidence of Subscription*, The Veronis, Suhler & Associates Communications Industry Forecast, July 1995, at 145; 1995 estimate from Nielsen Media Research as cited in *Broadcasting & Cable*, Oct. 23, 1995, at 62. The 1995 figure is for September.
 - (2) Total MVPD households were calculated by summing the total number of subscribers listed under each of the categories of the various technologies. Because there are no permanent VDT subscribers, the trial VDT subscriber totals were used.
 - (3) Cable subscribers: 1991-94 from Paul Kagan Associates, Inc., *History of Cable and Pay-TV Subscribers and Revenues*, Cable TV Investor, June 30, 1995, at 5; and 1995 from Paul Kagan Associates, Inc., *Paul Kagan's 10-Year Cable TV Industry Projections*, July 1995, at 7. The 1995 figure is for December.
 - (4) MMDS subscribers: 1991 from Wireless Cable Investor, June 30, 1994, at 1; 1992-94 from Paul Kagan Associates, Inc., *Wireless Cable Industry Projections, 1992-2002*, The 1995 Wireless Cable Databook, Jan. 1995, at 23; and 1995 from WCAI Comments, at 2. The 1995 figure is for June.
 - (5) SMATV subscribers: 1991-94 from *Cable & Pay TV Census -- December*, Marketing New Media, Dec. 19, 1994, at 4; and 1995 from John Mansell, Private Cable Investor, Oct 19, 1995. The 1995 figure is for September.
 - (6) HSD subscribers: 1991-92 from the SkyTRENDS research staff and the number of General Instrument authorizations for receipt of scrambled programming; 1993 from *Subscription Data from General Instrument* (Chart), SkyREPORT, Oct. 1994, at 21; 1994 from *1994 Net Authorizations* (Chart), SkyREPORT, Feb. 1995, at 9; and 1995 from *DTH Subscribers*, SkyREPORT, Oct. 1995, at 6. HSD subscriber figures were reduced by 1% to account for the estimated number of Canadian subscribers. The 1995 figure is for September.
 - (7) DBS subscribers: 1993 from *Let the Games Begin*, SkyREPORT, May 1994, at 2; 1994 from Kent Gibbons, *DBS: We're Walking the Walk*, Multichannel News, Jan. 16, 1995, at 3, 52; and 1995 from *DTH Subscribers*, SkyREPORT, Oct. 1995, at 6. The 1995 figure is for September.
 - (8) VDT Trials figures from Section 214 Applications, ex parte letters and associated filings with FCC. The 1994 and 1995 figures are for October.

TABLE 2

1995 Cable MSO Horizontal Concentration Nationwide¹

<u>Rank</u>	<u>Company</u>	<u>Pct. of Subs.²</u>
1	TCI	25.87
2	Time Warner	16.21
3	Continental Cablevision	6.85
4	Comcast	5.66
<i>Top 4</i>		54.59
5	Cox Cable	5.33
<i>Top 5</i>		59.92
6	Cablevision Systems	4.40
7	Adelphia	2.48
8	Cablevision Industries	2.32
9	Jones Intercable	2.20
10	Viacom	1.90
<i>Top 10</i>		73.22
<i>Top 25</i>		88.48
<i>Top 50</i>		95.21
HHI		1098³

¹ Calculated by applying the Commission's attribution rules to account for market shares as of October 31, 1995, based on subscriber totals as of March 31, 1995, and reported in Paul Kagan Assoc., Inc., *Top 100 Cable System Operators as of March 31, 1995*, Cable TV Investor, June 30, 1995 (Insert).

² The total number of industry subscribers used to calculate the HHIs is 60,400,000, which was obtained by projecting forward from the end-of-year total for 1994. Paul Kagan Assoc., Inc., *Pay TV Subscriber History*, Cable TV Financial Databook 12 (1995). The projection was arrived at by multiplying by a growth rate factor of 1.025% for the first three months of 1995, based on a reported 4.1% annual growth rate posted by the industry over the first six months of 1995. John M. Higgins & Richard Katz, *It's Basic: MSOs Having a Strong Year*, Multichannel News, July 17, 1995 at 110.

³ The HHI is calculated on the basis of market shares for the top 50 companies. Because all of the remaining MSOs have very small shares of the market, an HHI calculation that included all cable system operators could only be slightly higher (no more than 2-3 points) than the given HHI.

TABLE 3

Nationwide Concentration After Proposed Transactions¹

<u>Rank</u>	<u>Company</u>	<u>Pct. of Subs.²</u>
1	TCI	29.00
2	Time Warner	18.37
3	Continental	7.05
4	Comcast	6.89
<i>Top 4</i>		<i>61.31</i>
5	Cox	5.33
<i>Top 5</i>		<i>66.64</i>
6	Cablevision Systems	4.40
7	Adelphia	2.68
8	Jones Intercable	2.33
9	Marcus	2.11
10	Falcon	1.74
<i>Top 10</i>		<i>79.89</i>
<i>Top 25</i>		<i>91.13</i>
<i>Top 50</i>		<i>96.62</i>
HHI		1355³

¹ Calculated by applying the Commission's attribution rules to account for market shares if all transactions announced as of October 31, 1995, were consummated. The numbers of subscribers used to perform the calculations are reported in Paul Kagan Assocs., Inc., *Top 100 Cable System Operators as of March 31, 1995*, Cable TV Investor, June 30, 1995 (Insert).

² The total number of industry subscribers used to calculate the HHIs is 60,400,000, which was obtained by projecting forward from the end-of-year total for 1994. Paul Kagan Assocs., Inc., *Pay TV Subscriber History*, Cable TV Financial Databook 12 (1995). The projection was arrived at by multiplying by a growth rate factor of 1.025% for the first three months of 1995, based on a reported 4.1% annual growth rate posted by the industry over the first six months of 1995. John M. Higgins & Richard Katz, *It's Basic: MSOs Having a Strong Year*, Multichannel News, July 17, 1995, at 110.

³ The HHI is calculated on the basis of market shares for the top 50 companies. Because all of the remaining MSOs have very small shares of the market, an HHI calculation that included all cable system operators could only be slightly higher (no more than 2-3 points) than the given HHI.

TABLE 4
Changes In Concentration Of The
Cable Industry Based On Total Subscribers

	1990	1991	1992	1993	1994	1995	Post Merger
Top Share	24.0	24.5	25.2	24.3	24.8	25.9	28.8
Top 2 Share	36.7	37.1	37.9	36.9	37.3	42.1	47.4
Top 3 Share	42.0	42.3	43.2	42.3	42.4	48.9	54.4
Top 4 Share	45.6	46.0	48.2	47.2	47.2	54.6	61.3
Top 5 Share	48.8	48.9	51.9	50.9	51.0	59.9	66.6
Top 10 Share	61.6	61.4	64.6	63.2	63.3	73.2	79.9
Top 25 Share	80.8	80.2	84.5	83.1	83.4	88.5	91.3
Top 50 Share	91.2	90.9	94.5	93.1	92.4	95.2	96.6
HHI	866	872	928	880	898	1098	1355

Data for 1995 taken from, supra, Appendix G, Tables 2-3. Data for 1990 through 1994 were calculated from information contained in Paul Kagan Assocs., Inc., *Cable TV Financial Databook* 14 (1991); Paul Kagan Assocs., Inc., *Pay TV Subscriber History*, Cable TV Financial Databook 12 (1992); Paul Kagan Assocs., Inc., *Pay TV Subscriber History*, Cable TV Financial Databook 12 (1993); and Paul Kagan Assocs., Inc., *Pay TV Subscriber History*, Cable TV Financial Databook 14 (1994). The data for the years 1990-94 have been recalculated after discussions with Paul Kagan Associates personnel concerning that company's methodology for including consolidated, non-consolidated and international subscribers. International subscribers have been deducted from TCI's subscriber totals in 1991-93 and the estimate of TCI's subscribers in 1994 was similarly modified assuming continuation of historical trends. The figure for TCI's subscribership in 1990 based on information contained in TeleCommunications, Inc., *Form 10-K*, Dec. 31, 1990, at I-2 to I-4.